

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,843	10/23/2001	Pramathesh Desai	ITW7510.006	3020
33647	7590 03/03/2004	•	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, LLC (ITW) 14135 NORTH CEDARBURG ROAD			JAGAN, MIRELLYS	
MEQUON, WI 53097			ART UNIT	PAPER NUMBER
,			2859	
			DATE MAILED: 03/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<del>-</del>		Application No.	Applicant(s)				
Office Action Summary		09/682,843	DESAI ET AL.				
		Examiner	Art Unit				
		Mirellys Jagan	2859	BW			
Period fo	The MAILING DATE of this communicat		et with the correspondence ac	Idress			
A SH THE - Exter after - If the - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA rasions of time may be available under the provisions of 3' SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) de period for reply is specified above, the maximum statutor to reply within the set or extended period for reply will, reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, nation. 19s, a reply within the statutory minimum ry period will apply and will expire SIX (6 by statute. cause the application to become	nay a reply be timely filed  of thirty (30) days will be considered time ) MONTHS from the mailing date of this o me ABANDONED (35 U.S.C. § 133).	ly. ommunication.			
Status							
1)	Responsive to communication(s) filed of	on <u>22 December 2003</u> .					
•	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
5)⊠ 6)⊠ 7)⊠	<ul> <li>✓ Claim(s) 1-24 and 26-32 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>✓ Claim(s) 32 is/are allowed.</li> <li>✓ Claim(s) 1,3,4,7-9,16-24,26 and 31 is/are rejected.</li> <li>✓ Claim(s) 2, 5, 6, 10-15, 27-30 is/are objected to.</li> <li>✓ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Applicat	ion Papers						
10)⊠	The specification is objected to by the E The drawing(s) filed on 10/23/01 is/are: Applicant may not request that any objectio Replacement drawing sheet(s) including the The oath or declaration is objected to by	a) accepted or b) ⊠ objeon to the drawing(s) be held in ale correction is required if the dra	peyance. See 37 CFR 1.85(a). wing(s) is objected to. See 37 C				
Priority (	ınder 35 U.S.C. § 119						
12)□ a)	Acknowledgment is made of a claim for  All b) Some * c) None of:  1. Certified copies of the priority doc  2. Certified copies of the priority doc  3. Copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the attached detailed Office action for the certified copies of the attached detailed Office action for the certified copies of the attached detailed Office action for the certified copies of the attached detailed Office action for the certified copies of the certif	cuments have been received cuments have been received he priority documents have l Bureau (PCT Rule 17.2(a)).	in Application No  Deen received in this National	Stage			
Attachmen							
2)  Notice 3)  Infor	ee of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO-1449 or PTo- rr No(s)/Mail Date	-948) Pape	view Summary (PTO-413)  Ir No(s)/Mail Date  Be of Informal Patent Application (PTore)  Ir:	O-152)			

#### **DETAILED ACTION**

# Response to Arguments

1. Applicant's arguments in the Amendment filed 12/22/03, with respect to the rejection(s) of claim(s) 1, 3, 4, 7-9, 22-26, and 31 under 35 U.S.C. §103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of OMEGA® and U.S. Patent 2,785,654 to Lundberg, Sr., et al [hereinafter Lundberg].

### **Drawings**

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the assembly having one collet, as claimed in claims 5 and 29; the assembly having one resistance mechanism, as claimed in claim 3; only one of the sticks having a ridge, as claimed in claims 6 and 30; and the housing having one annular ring/lip, as claimed in claims 10 and 28, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### Claim Objections

3. Claims 2-6, 10-15, 22-24, and 26-30 are objected to because of the following informalities:

Art Unit: 2859

In claim 2, there is lack of antecedent basis in the specification for the housing having one annular ring, as stated by "at least one" ring in line 3. The specification and figures disclose that there are at least two rings.

In claim 3, there is lack of antecedent basis in the specification for the housing having only one resistance mechanism for one stick, as stated by a resistance mechanism for "at least one" stick in line 2. The specification and figures disclose that there are two resistance mechanisms, one for each stick.

Claim 5 claims that the at least one collet has threads that attaches to the connector and are configured to engage one of the sticks. This is not clear since the claim appears to state that the collet has one set of threading that functions to attach to the connector and engage one of the sticks. The disclosure discloses that the collet has two different sets of threads: one for attaching to the connector, i.e., 35, and another (38) for engaging the stick (see figure 3). Furthermore, there is lack of antecedent basis in the specification for the housing having one collet, as stated by "at least one" collet in line 2. The specification and figures disclose that there are two collets.

In claim 6, there is lack of antecedent basis in the specification for the only one of the sticks having a ridge, as stated by "at least one" stick in line 2. The specification and figures disclose that both sticks have a ridge.

In claim 10, there is lack of antecedent basis in the specification for the housing having one annular ring, as stated by "at least one" ring in line 4. The specification and figures disclose that there are at least two rings.

In claim 22, "independent" should be changed to --independently--.

In claim 28, there is lack of antecedent basis in the specification for the housing having one annular lip, as stated by "at least one" lip in line 9. The specification and figures disclose that there are at least two lips.

In claim 29, there is lack of antecedent basis in the specification for the connector having one collet, as stated by "at least one" collet in line 9. The specification and figures disclose that there are two collets.

In claim 30, there is lack of antecedent basis in the specification for the only one of the sticks having a ridge, as stated by "at least one" stick in line 8. The specification and figures disclose that both sticks have a ridge.

Claims 4, 11-15, 23, 24, and 26-30 are objected to for being dependent on an objected base claim. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by the publication titled "OMEGAMARKER® Temperature Test Kit" by OMEGA® [hereinafter OMEGA®].
  - OMEGA® discloses a temperature indicator stick assembly comprising:

Art Unit: 2859

a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature; and

a connector (the case) physically connecting the first and second sticks in a single assembly such that the first and second sticks are independently operable and moveable with respect to each other and the connector.

Referring to claim 22, in providing the assembly disclosed by OMEGA® above, the method steps of claim 22 will inherently be followed.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 3, 4, 7-9, 16-24, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over OMEGA® in view of U.S. Patent 2,785,654 to Lundberg, Sr. et al [hereinafter Lundberg].

Referring to claims 1, 3, 4, 7-9, OMEGA® discloses a temperature indicator stick assembly comprising:

a first temperature indicating stick comprised of a compound that melts at a first temperature;

Art Unit: 2859

a second indicator stick comprised of a second component that melts at a second temperature;

a stick holder for each stick, the holders each receiving a stick therein and used for manually holding each stick.

OMEGA® does not disclose the holders comprising a connector that connects a first and a second stick in a single assembly, such that the first and second sticks are independently operable and moveable with respect to each other and the connector; the connector having a plurality of flanges that limit rotational movement of at least one of the sticks about an axis; the connector comprising a first element and a second element each having a marking end and a union end, wherein the union ends thread together; and wherein the connector prevents contact between the sticks.

Lundberg discloses a dual holder for holding two sticks, the holder comprising a connector that connects a first and a second stick in a single assembly, such that the first and second sticks are independently operable and moveable with respect to each other and the connector. The connector comprises a first element (10) and a second element (12) each having a marking end and a union end, wherein the union ends are held together by being frictionally inserted into a ring (14). The marking ends of the elements each have a plurality of flanges (24) that engage and grip the sticks therein and align the sticks along an axis (the gripping of the sticks therein can limit the rotational movement of the sticks about the axis and can prevent contact between the sticks by gripping them apart from each other) (see figure 2; column 1, line 52-column 2, line 35; and column 2, line 63-column 3, line 16).

Art Unit: 2859

Referring to claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® by replacing the holders with dual holders, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly.

Referring to claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® and Lundberg by threading the union ends of the elements to the ring in order to more securely connect the elements to each other.

Referring to claims 16-21, OMEGA® discloses a temperature indicator stick apparatus comprising:

a first temperature indicator stick for indicating a first temperature when in direct contact with a heated surface by leaving a portion of itself thereon;

a second temperature indicator stick for indicating a second temperature when in direct contact with a heated surface by leaving a portion of itself thereon; and

stick holders each replaceably retaining one stick therein.

OMEGA® does not disclose each of the holders being a connector that replaceably retains the first stick to the second stick to form a single indicator stick capable of indicating at least two temperatures, wherein the connector allows extension of the first stick without affecting the position of the second stick relative the connector; and the connector comprising means for aligning the sticks along an axis, means for resisting rotational movement of the sticks about an axis, and means for controlling movement of the sticks.

Lundberg discloses a dual holder for replaceably retaining and holding two sticks, the holder comprising a connector that connects a first and a second stick in a single assembly, such that the first and second sticks are independently operable and moveable with respect to each other and the connector. The connector comprises a first element (10) and a second element (12) each having a marking end and a union end, wherein the union ends are held together by being frictionally inserted into a ring (14). The marking end of each element has a spring and a plurality of flanges (24) that engage and grip the sticks therein and align the sticks along an axis (the gripping of the sticks therein creates a resistance to rotational movement of the sticks about the axis and control the movement of the sticks) (see figure 2; column 1, line 52-column 2, line 35; and column 2, line 63-column 3, line 16).

Referring to claim 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus disclosed by OMEGA® by replacing the holders with dual holders, as taught by Lundberg, in order to reduce the size of the apparatus by reducing the number of individual sticks in the apparatus.

Referring to claims 22-24 and 26, OMEGA® discloses a temperature indicator stick assembly comprising:

a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature;

Art Unit: 2859

a stick holder for each stick, the holders each receiving a stick therein and used for manually holding each stick.

OMEGA® does not disclose the holders each comprising a housing that connects a first and a second stick in a single assembly such that the first and second sticks are independently operable and moveable with respect to each other and the housing; the housing having means for aligning and preventing rotational movement of the sticks about an axis; and the housing having two threaded members connected to engage the sticks.

Lundberg discloses a dual holder for replaceably retaining and holding two sticks, the holder comprising a housing that connects a first and a second stick in a single assembly, such that the first and second sticks are independently operable and moveable with respect to each other and the housing. The housing has two members (10 and 12) frictionally connected to a ring (14). The members each have a spring and a plurality of flanges (24) that engage and grip a sticks therein and align the sticks along an axis (the gripping of the sticks therein can prevent rotational movement of the sticks about the axis) (see figure 2; column 1, line 52-column 2, line 35; and column 2, line 63-column 3, line 16).

Referring to claim 22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® by replacing the holders with dual holders, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly.

Referring to claim 26, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® and Lundberg

Art Unit: 2859

by threading the members to the ring in order to more securely connect the members to each other.

Further referring to claims 22-24 and 26, in providing the assembly disclosed by OMEGA® and Lundberg above, the method steps of claims 22-24 and 26 will inherently be followed.

Referring to claim 31, OMEGA® discloses a temperature indicator stick assembly comprising:

a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature;

a stick holder for each stick, the holders each receiving a stick therein and used for manually holding each stick.

OMEGA® does not disclose the holders each comprising a connector that connects a first and a second stick in a single assembly, wherein the connector comprises a first element and a second element each having a marking end and a union end, wherein each union end extend beyond an end of a respective stick housed therein, and the union ends are threaded together.

Lundberg discloses a dual holder for replaceably retaining and holding two sticks, the holder comprising a connector having a first element and a second element (10 and 12) that connects a first and a second stick in a single assembly, respectively, such that the first and second sticks are independently operable and moveable with respect to each other. The elements

Art Unit: 2859

each have a marking end and a union end, wherein the union end extend beyond a respective stick, and the union ends of the elements are frictionally connected to a ring (see figure 2; column 1, line 52-column 2, line 35; and column 2, line 63-column 3, line 16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® by replacing the holders with dual holders, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA® and Lundberg by threading the elements to the ring in order to more securely connect the elements to each other.

### Allowable Subject Matter

- 8. Claim 32 is allowed.
- 9. Claims 10-15 and 28-30 would be allowable if rewritten and amended to overcome the objections set forth in this Office action.
- Claims 2, 5, 6, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and amended to overcome the objections set forth in this Office action.
- 11. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2859

The prior art of record does not disclose or suggest the following in combination with the remaining limitations of the claims:

A dual temperature indicator stick assembly comprising a connector comprising:

a pair of collets having threads and rotatably coupled to at least one annular ring of the connector housing, wherein each of the collets is configured to engage separate indicator sticks upon rotation of the collet about the housing (see dependent claim 2); or

at least one collet having threads attached to the connector, the threads being configured to engage one of the first and second indicator sticks (see dependent claim 5).

A dual temperature indicator stick assembly comprising first and second temperature indicator sticks, wherein at least one of the sticks has a ridge configured to engage threads of a collet during extension of one of the sticks from each other (see dependent claim 6).

A dual temperature indicator stick holder comprising a housing and a pair of collets having threads, the collets being rotatably coupled to an at least one annular ring of the housing and configured to engage separate indicator sticks upon rotation of the collet about the housing (see independent claim 10).

A method to provide a dual temperature indicator stick assembly, comprising the step of providing first and second sticks <u>having an oval shape to provide a volume of space for stick</u> residue within the two threaded members (see dependent claim 27).

A dual temperature indicator stick assembly comprising a housing and a pair of collets having threads, the collets being rotatably coupled to at least one annular lip of the housing and configured to engage separate indicator sticks upon rotation of the collet about the housing (see independent claim 28).

Art Unit: 2859

A dual temperature indicator stick assembly comprising a connector and at least one collet having threads attached to the connector, the threads configured to engage one of the fist and second indicator sticks (see independent claim 29).

A dual temperature indicator stick assembly wherein at least one of the first and second sticks has a ridge configured to engage threads of a collet during extension of one of the first and second sticks from each other (see independent claim 30).

12. The following is an examiner's statement of reasons for allowance:

A method to provide a dual temperature indicator stick assembly, comprising the step of providing a housing having two threaded members connected thereto to engage the first and second oval-shaped sticks, wherein the oval shape of the indicator sticks provides a volume of space for stick residue within the two threaded members (see independent claim 32).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 703-305-0930. The examiner can normally be reached on Monday-Thursday from 8AM to 4PM.

Art Unit: 2859

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 703-308-3875. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ

February 18, 2004

Diego Gutierrez Supervisory Patent Examiner Technology Center 2800